



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT REC'T PTO 24 JAN 2005

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference H1810-01	FOR FURTHER ACT	ION See Notific	ation of Transmittal of International Examination Report (Form PCT/IPEA/416)
International application No.	International filing date	(day/month/year)	Priority date (day/month/year)
PCT/JP2003/009367	24 July 2003 (2	4.07.2003)	24 July 2002 (24.07.2002)
International Patent Classification (IPC) or n G02B 5/30, G02F 1/1335	lational classification and l	PC	
Applicant	NITTO DENKO CO	ORPORATION	
and is transmitted to the applicant a	according to Article 36.		ational Preliminary Examining Authority
2. This REPORT consists of a total of	sheets, in	ncluding this cover s	heet.
This report is also accompar amended and are the basis for 70.16 and Section 607 of the	or this report and/or sheets	containing rectifica	on, claims and/or drawings which have been ations made before this Authority (see Rule
These annexes consist of a t	otal ofsh	eets.	
3. This report contains indications rel	ating to the following item	s:	
I Basis of the report			
II Priority			
III Non-establishment	of opinion with regard to	novelty, inventive s	tep and industrial applicability
IV Lack of unity of in	vention		
V Reasoned statemen	nt under Article 35(2) with mations supporting such st	regard to novelty, in atement	nventive step or industrial applicability;
VI Certain documents	cited		
VII Certain defects in	the international application	n	
VIII Certain observatio	ns on the international app	lication	
Date of submission of the demand		Date of completion	of this report
26 December 2003 (26.	.12.2003)	16 Se	eptember 2004 (16.09.2004)
Name and mailing address of the IPEA/JP		Authorized officer	
Facsimile No.		Telephone No.	

Form PCT/IPEA/409 (cover sheet) (July 1998)

Cranslation



I. Ba	sis of	the rep	port	
1. W	ith reg	gard to	the elements of the international application:*	1
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4.		The ar	mendments have resulted in the cancellation of:	
			the description, pages	
		\sqcap	the claims, Nos.	
		\sqcap	the drawings, sheets/fig	
5.		This re	report has been established as if (some of) the amendments had not been made, since they have been considered the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	d to go
i	n this and 7(s repoi 0.17).	t sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are refe ort as "originally filed" and are not annexed to this report since they do not contain amendments (Rule	rred to ? 70.16
			ment sheet containing such amendments must be referred to under item 1 and annexed to this report.	

Interna	application No.
PC7	T/JP2003/009367

II. Priority	
1. This report has been established as if no priority limit the requested:	had been claimed due to the failure to furnish within the prescribed time
copy of the earlier application whose prior	rity has been claimed.
translation of the earlier application whose	e priority has been claimed.
2. This report has been established as if no priority	y had been claimed due to the fact that the priority claim has been found invalid.
Thus for the purposes of this report, the international filing	ng date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:	
(See supplemental sheet)	
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Internation pplication No. PCT/JP 03/09367

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: II. 3.

JP 2002-215855 A, which serves as the basis for claiming priority of this application, does not disclose the feature of a polarizer containing a dichroic substance in a matrix, wherein the in-plane phase difference in the measurement wavelength which does not exhibit absorption falls within the range of 950 to 1350nm.

As a consequence, the opinions concerning novelty, inventive step and industrial applicability described in this written opinion were prepared taking the date of the international application as the reference date.

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PCT/JP 03/09367

v.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
	citations and explanations supporting such statement

1. Statement			
Novelty (N)	Claims	2-3, 18	YES
	Claims	1, 4-17, 19	NO
Inventive step (IS)	Claims		YES
2	Claims	1-19	NO
Industrial applicability (IA)	Claims	1-19	YES
•	Claims		NO

2. Citations and explanations

- Document 1: JP 10-268294 A (Canon Inc.), 9 October 1998, entire text; all drawings, especially paragraph [0035] polarizer plate (5); paragraphs [0018] to [0020] (Family: none)
- Document 2: JP 2002-333522 A (Nitto Denko Corporation), 22

 November 2002, entire text; all drawings,
 especially paragraphs [0059] and [0060];
 comparative example 1; comparative example 2

 (Family: none)
- Document 3: JP 6-138319 A (Kuraray Co., Ltd.), 20 May 1994, entire text; all drawings & JP 3342516 B2
- Document 4: JP 2002-28939 A (Kuraray Co., Ltd.), 29

 January 2002, entire text; all drawings,
 especially [claim 1] & JP 3422759 B2
- Document 5: EP 1153961 A2 (Kuraray Co., Ltd.), 14 November 2001, entire text; all drawings, especially claim 1 & JP 2002-28938 A entire text; all drawings & US 2001/0039319 A1 & CN 1321703 A & KR 2001100955 A
- Document 6: JP 6-347641 A (Kuraray Co., Ltd.), 22 December 1994, entire text; all drawings, especially paragraph [0035], comparative example 1; comparative example 3 (Family: none)

Document 8: JP 2001-228333 A (Sumitomo Chemical Co., Ltd.), 24 August 2001, entire text; all drawings (Family: none)

Document 9: US 2001/0033349 A1 (Masaru Honda et al.), 25
October 2001, entire text; all drawings & JP
2001-228332 A (entire text; all drawings) &
KR 2001062239 A TW 509803 A

Claims 1, 4 to 11, 14 to 17 and 19

Documents 1 and 2 set forth polarizers containing a dichroic substance in a matrix.

Documents 1 and 2 do not directly disclose a measurement wavelength which does not exhibit absorption, wherein in-plane phase difference is set to fall within the range of 950nm to 1350nm.

However, in the light of the materials used in polarizers, and the numerical values for diffraction rate and thickness, documents 1 and 2 are understood to disclose polarizers which are highly likely to correspond to the aforementioned range.

Therefore the inventions set forth in claims 1, 4 to 11, 14 to 17 and 19 lack novelty in the light of documents 1 and 2.

Claims 2 and 3

As the degree of variation in in-plane phase difference of polarizers, claims 2 and 3 make a variety of specifications concerning differential variation, the distance between maximum and minimum values, and the degree of difference between maximum and minimum values.

However, in the field of polarizers, techniques of reducing the variation in in-plane phase difference or

parameters with the same meaning are well known, as described in documents 3 to 5, for example, and when specifying these values, determining the specific assessment method, measurement method, and determining the assessment values and measurement values specified by these assessment methods and measurement methods are merely matters which would be determined as necessary by a person skilled in the art according to the design requirements and performance requirements.

Therefore the invention set forth in claims 2 and 3 does not involve an inventive step in the light of a combination of the known techniques set forth in documents 1, 2, and 3 to 5.

Claims 12 and 13

It is a known technique in common practice to combine polarizers with polarizing changers or phase differentiating films.

Refer to documents 2 and documents 7 to 9 for examples of techniques of combining polarizers with polarizing changers or phase differentiating films.

Claim 18

It is a known technique in common practice to apply a polarizer to an electroluminescence display unit.

Moreover, refer to document 7 as an example of this technique.

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claim 1 sets forth a polarizer, wherein the in-plane phase difference in the measurement wavelength which does not exhibit absorption falls within the range of 950 to 1350nm.

However, the values of the aforementioned measurement wavelength which does not exhibit absorption are undefined and unclear, hence the range of values for in-plane phase difference thereby described is undefined and unclear. Therefore the polarizer described by the aforementioned in-plane phase difference is unclear.

Claim 2 describes the range of values for differential phase difference variation for in-plane phase difference at measurement wavelengths which do not exhibit absorption.

However, the values of the aforementioned measurement wavelength which does not exhibit absorption are undefined and unclear, hence the range of values for variation in differential phase difference of in-plane phase difference thereby described is undefined and unclear. Therefore the polarizer described by the aforementioned variation in differential phase difference of the aforementioned in-plane phase difference is unclear.

Claim 3 sets forth a measurement wavelength which does not exhibit absorption, wherein the distance between the region which exists maximum value for in-plane phase difference and the minimum value for in-plane phase difference is 10mm or less or 100mm or more, and the difference between the aforementioned maximum and minimum

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VIII. Certain observations on the international application

values (the variation of in-plane phase difference) is less than 60nm.

However, the values of the aforementioned measurement wavelength which does not exhibit absorption are undefined and unclear, therefore the range of values for distance between the region which exhibits the maximum value and the region which exhibits the minimum value for in-plane phase difference thereby described is undefined and unclear. Therefore the polarizer described by the aforementioned range of values for distance between the region exhibiting the maximum value and the region exhibiting the minimum value for in-plane phase difference, and the range of values for the difference between maximum and minimum values, is unclear.